Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1 – 12: Cancelled

13. (New) A method of producing a calibration wafer having at least a predetermined emissivity, including the steps of:

providing a wafer of semiconductor material;

subjecting the bulk material of the wafer to at least one of doping with foreign atoms and generating lattice defects to adjust the predetermined emissivity;

coating the wafer to obtain a further optical characteristic.

14. (New) A method according to claim 13, wherein said further optical characteristic is a predetermined reflectivity.

15. (New) A method according claim 13, wherein said emissivity is established to a value of between 0.25 and 0.8.

16. (New) A method according to claim 13, wherein said at least one of doping with foreign atoms and generating lattice defects is effected essentially homogeneously over the bulk material of the wafer.

17. (New) A method according to claim 13, wherein said at least one of doping with foreign atoms and generating lattice defects is effected in a predetermined region.

18. (New) A method according to claim 17, wherein said predetermined region is a layer of the wafer.

19. (New) A method according to claim 17, wherein a surface layer of the wafer is doped.

20. (New) A method according to claim 13, wherein doping is effected with at least one of boron, phosphorous and arsenic.

21. (New) A method according to claim 13, wherein adjusting of the predetermined emissivity is effected essentially exclusively via said at least one of doping with foreign atoms and generating lattice defects.

22. (New) A method according to claim 13, wherein the wafer is doped with a density of foreign atoms that is between 10^{16} and 10^{19} foreign atoms per cubic centimeter.

23. (New) A method according to claim 13, wherein the predetermined emissivity is effected at least partially via a selection of the thickness of the wafer.

24. (New) A method according to claim 13, wherein said further optical characteristic is a reflectivity of the wafer, and wherein the reflectivity is established to a value between 0.2 and 0.8.

25. (New) A method according to claim 13, wherein the wafer is coated with a metallic layer to obtain the further optical characteristic.

26. (New) A method according to claim 25, wherein the wafer is coated with cobalt.